ABSTRACT OF THE DISCLOSURE

An optical printing device for exposing a photosensitive recording medium to form a grayscale image includes a print head having n rows of recording elements capable of exposure of different colors and aligned in a direction of advancement of the photosensitive recording medium, where n is an integer more than 1, the n rows of recording elements being spaced substantially a multiple of Lx(m+k/n) apart in the direction of advancement of the photosensitive recording medium, where L denotes a distance between the centers of recording pixels according to the desired resolution of a recorded image, m is an integer of 1 or more, and k is an integer of 1 or more and less than n. The optical printing device also includes a head driver for driving the print head. Light from the print head is selectively exposed on the photosensitive recording medium to form the grayscale image.